

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

1. (Currently amended) An electroluminescent display apparatus, comprising:

a plurality of display cells arranged in a matrix form in which a plurality of scan lines and a plurality of data lines intersect, wherein each of the display cells ~~including~~includes

a select transistor whose gate receives a select voltage from one of the scan lines;₁

a drive transistor whose gate receives a data voltage from one of the data lines through the select transistor;₁

a capacitor whose one terminal is connected to the gate of the drive transistor;₁ and

an electroluminescent element whose one terminal is connected to one of a source and a drain of the drive transistor;₁ and

a scan line driving circuit that supplies a stepped pulse as the select voltage to each of the scan lines, the stepped pulse being formed of a first voltage and a second voltage larger than the first voltage, wherein

~~a~~the other of the source and the drain of the drive transistor and the other terminal of the capacitor are connected to a scan line next to the one of the scan lines.

2. (*Currently amended*) The electroluminescent display apparatus according to claim 1, wherein the stepped pulse is formed so that the first voltage is allocated on a former of two cycles and the second voltage is allocated on a later of the two cycles, and the scan line driving circuit supplies the stepped pulse sequentially to the scan lines by shifting the stepped pulse by the one cycle.

3. (*Currently amended*) The electroluminescent display apparatus according to claim 2, wherein the scan line driving circuit further supplies a rectangular pulse to a scan line different from ~~a~~ the scan line to which the stepped pulse is being supplied, and the rectangular pulse is formed of a third voltage having a pulse width of the stepped pulse.

4. (*Original*) The electroluminescent display apparatus according to claim 3, wherein the third voltage is equal to the second voltage.

5. (*Currently amended*) The electroluminescent display apparatus according to claim 1, wherein the scan line driving circuit further supplies a rectangular pulse to a scan line different from ~~a~~ the scan line to which the stepped pulse is being supplied, sequentially by shifting the stepped pulse by

~~the one~~ cycle, and the rectangular pulse is formed of a third voltage having a pulse width of the stepped pulse.

6. (*Original*) The electroluminescent display apparatus according to claim 5, wherein the third voltage is equal to the second voltage.

7. (*Original*) The electroluminescent display apparatus according to claim 1, further comprising a data line driving circuit that supplies a data voltage to each of the data lines, the data voltage being not smaller than the first voltage and smaller than the second voltage.

8. (*Original*) The electroluminescent display apparatus according to claim 1, wherein the electroluminescent element is an organic light emitting diode.

9. (*Currently amended*) An electroluminescent display apparatus, comprising:

a plurality of display cells arranged in a matrix form in which a plurality of select scan lines and a plurality of data lines intersect, wherein each of the display cells ~~including~~includes

a select transistor whose gate receives a select voltage from one of the select scan lines;₁

a drive transistor whose gate receives a data voltage from one of the data lines through the select transistor;₁

a capacitor whose one terminal is connected to the gate of the drive transistor;₁ and

an electroluminescent element whose one terminal is connected to one of a source and a drain of the drive transistor;

a plurality of write scan lines, each of the write scan lines being arranged in a pair with each of the select scan lines and being connected to ~~a~~ the other of the source and the drain of the drive transistor and the other terminal of the capacitor; and

a scan line driving circuit that supplies a scan line select voltage to each of the select scan lines, and that supplies a write reference voltage to each of the write scan lines that is in a pair with the each of the select scan lines, wherein

the scan line driving circuit supplies the scan line select voltage and the write reference voltage at a voltage value and a timing such that a first phase, a second phase, and a third phase are sequentially repeated, the first phase indicates that the data voltage is written in the capacitor without allowing the electroluminescent element to emit light, the second phase indicates that a

voltage stored in the capacitor is held without allowing the electroluminescent element to emit light, and the third phase indicates that light emission by the electroluminescent element is sustained until ~~the~~a next first phase depending on the voltage stored.

10. (*Currently amended*) The electroluminescent display apparatus according to claim 9, wherein the scan line driving circuit supplies the scan line select voltage and the write reference voltage with respect to each of the select scan lines and each of the write scan lines, at a voltage value and a timing such that a negative voltage is supplied to the capacitor, concurrently with the first, ~~to~~the second, and the third phases, and

the each of the select scan lines and the each of the write scan lines are different from the select scan line and the write scan line that are under the first, ~~to~~the second, and the third phases.

11. (*Original*) The electroluminescent display apparatus according to claim 9, wherein the electroluminescent element is an organic light emitting diode.

12. (*Currently amended*) An electroluminescent display apparatus, comprising:

a plurality of display cells arranged in a matrix form in which a plurality of scan lines and a plurality of data lines intersect, wherein each of the display cells ~~including~~includes

a select transistor whose gate receives a select voltage from one of the scan lines;

a drive transistor whose gate receives a data voltage from one of the data lines through the select transistor;

a capacitor whose one terminal is connected to the gate of the drive transistor; and

an electroluminescent element whose one terminal is connected to one of a source and a drain of the drive transistor;

a plurality of common lines, each of the common lines being connected to the other of the source and the a-drain of the drive transistor and other terminal of the capacitor; and

a data line driving circuit that calculates a voltage drop in the electroluminescent element at a position in a direction of each of the scan lines, based on the position in the direction with respect to the each of common lines and a wiring resistance between the display cells arranged on the each of

common lines, and that supplies a data voltage corrected based on the voltage drop to each of data lines.

13. (*Original*) The electroluminescent display apparatus according to claim 12, wherein the electroluminescent element is an organic light emitting diode.

14. (*Currently amended*) A driving method of an electroluminescent display apparatus that includes

a plurality of display cells arranged in a matrix form in which a plurality of scan lines and a plurality of data lines intersect, wherein each of the display cells ~~including~~ includes

a select transistor whose gate receives a select voltage from one of the scan lines; ₁

a drive transistor whose gate receives a data voltage from one of the data lines through the select transistor; ₁

a capacitor whose one terminal is connected to the gate of the drive transistor; ₁ and

an electroluminescent element whose one terminal is connected to one of a source and a drain of the drive transistor, wherein ~~a~~ the other of the source and the drain of the drive transistor and other terminal of the

capacitor are connected to a scan line next to the one of the scan lines, the driving method comprising:

~~first-supplying a first-select-on voltage to each of the scan lines~~ a scan line during a predetermined cycle time period;

~~second-supplying a second-select-maintain voltage larger than the first select-on voltage to the each of the scan lines~~ line and the select-on voltage to a next scan line during the cycle, successively from the first supplying a subsequent time period; and

~~third-supplying a select-off voltage not larger than a threshold voltage of the select transistor to each of the scan lines~~ other than the scan line and the next scan line during the time period and the subsequent time period, at least during the cycle, successively from the second supplying,

wherein supplying of the select-on voltage, the select-maintain voltage, and the select-off voltage shifts to the next scan line during the subsequent time period.

15. *(Currently amended)* The driving method according to claim 14, ~~wherein~~ further comprising:

~~the first supplying includes supplying a third-an erase voltage to each of the another scan lines~~ line during the cycle time period, the each of the

~~another scan lines is line being~~ different from the scan line and the next scan line ~~to which the first voltage is being supplied,~~

~~the second supplying includes supplying the third erase voltage to the each of the a next another scan lines line during the cycle~~ the subsequent time period while maintaining the erase voltage to the another line, and wherein

the select-off is applied to scan lines other than the scan line, the next scan line, the another scan line, and the next another scan line during the time period and the subsequent time period.

~~the third supplying includes supplying a voltage not larger than a threshold voltage of the select transistor to the each of the scan lines, at least during the cycle.~~

16. *(Currently amended)* A driving method of an electroluminescent display apparatus that includes

a plurality of display cells arranged in a matrix form in which a plurality of select scan lines and a plurality of data lines intersect, wherein each of the display cells ~~including~~ includes

a select transistor whose gate receives a select voltage from one of the select scan lines;

a drive transistor whose gate receives a data voltage from one of the data lines through the select transistor;

a capacitor whose one terminal is connected to the gate of the drive transistor; and

an electroluminescent element whose one terminal is connected to one of a source and a drain of the drive transistor; and

a plurality of write scan lines, each of the write scan lines being arranged in a pair with each of the select scan lines and being connected to ~~a~~ the other of the source and the drain of the drive transistor and other terminal of the capacitor, the driving method comprising:

first supplying the select voltage and a write reference voltage to each of the select scans line and each of the corresponding write scan lines, respectively, at a voltage value and a timing such that the data voltage is written in the capacitor, without allowing the electroluminescent element to emit light;

second supplying the select voltage and the write reference voltage to the each of the select scan lines and the each of the corresponding write scan lines, respectively, at a voltage value and a timing such that a voltage stored in the capacitor is held, without allowing the electroluminescent ~~device~~ element to emit light; and

third supplying the select voltage and the write reference voltage to the each of the select scan lines and the each of the corresponding write scan lines, respectively, at a voltage value and a timing such that light emission of the

electroluminescent device is sustained until the next first supplying, based on the voltage stored in the capacitor.

17. (~~Original~~Currently amended) The driving method according to claim 16, further comprising fourth supplying the select voltage and the write reference voltage to the each of the select scan lines and the each of the corresponding write scan lines, respectively, different from the select scan line and the corresponding write scan line to which the first supplying, the second supplying, and the third supplying are being applied, at a voltage value and a timing such that a negative voltage is supplied to the capacitor, concurrently with the first supplying, the second supplying, and the third supplying.

18. (Currently amended) A driving method of an electroluminescent display apparatus that includes

a plurality of display cells arranged in a matrix form in which a plurality of scan lines and a plurality of data lines intersect, wherein each of the display cells ~~including~~ includes

a select transistor whose gate receives a select voltage from one of the scan lines;

a drive transistor whose gate receives a data voltage from one of the data lines through the select transistor;

a capacitor whose one terminal is connected to the gate of the drive transistor; and

an electroluminescent element whose one terminal is connected to one of a source and a drain of the drive transistor; and

a plurality of common lines, each of the common lines being connected to a the other of the source and the drain of the drive transistor and the other terminal of the capacitor, the driving method comprising:

calculating a voltage drop in the electroluminescent element at a position in a direction of each of the scan lines, based on the position in the direction with respect to the each of common lines and a wiring resistance between the display cells arranged on the each of common lines;

correcting the data voltage based on the voltage drop; and

supplying the data voltage corrected to each of the data lines.

19. (New) An display cell for an display apparatus, comprising:

a select transistor having a gate electrically connected to a select scan line;

a drive transistor having a gate electrically connected to a data line through the select transistor, a first controlled terminal electrically connected to a supply line, and a second controlled terminal be electrically connected to a write scan line corresponding to the select scan line;

a capacitor having a first terminal electrically connected to the gate of the drive transistor and a second terminal electrically connected to the write scan line; and

a display element electrically connected either in between the supply line and the first controlled terminal of the drive transistor or in between the write scan line and the second controlled terminal of the drive transistor.

20. (New) The display cell of claim 19, wherein if the display element is electrically connected in between the write scan line and the second controlled terminal of the drive transistor, the display element is also electrically connected in between the write scan line and the second terminal of the capacitor.

21. (New) The display cell of claim 20, wherein the display element is an organic light emitting diode.

22. (New) The display cell of claim 20, wherein the first controlled terminal of the drive transistor is one of a source and a drain and the second controlled terminal is the other of the source and the drain.

23. (New) The display cell of claim 20, wherein the supply line is connected to ground potential.

24. (New) The display cell of claim 20, wherein the select scan line is a scan line for a current row of display cells and the write scan line is a scan line for the next row of display cells.

25. (New) The display cell of claim 24, wherein the first controlled terminal of the drive transistor is one of a source and a drain and the second controlled terminal is the other of the source and the drain.

26. (New) The display cell of claim 24, wherein the supply line is connected to a positive potential Vdd.